

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: STP00-0957-00(009), Newton County **OFFICE:** Engineering Services
P. I. No.: 245190
SR 212 Widening and Reconstruction **DATE:** January 28, 2009

FROM: Ronald E. Wishon, Acting Project Review Engineer *REW*

TO: Foster Grimes, District 2, Design Squad Leader

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate alternatives recommended for implementation to the extent reasonable in the design of the project.

	Description	Savings PW & LCC	Implement	Comments
ROADWAY (RD)				
RD-1	Delete two-way left turn; provide left turn-lanes for school and fire station.	\$443,623	Yes	This should be done. Two-way center turn lane not provided throughout the project.
RD-2	Delete two-way turn lane north of school.	\$270,850	No	Already included in RD-1.
RD-4	Reduce side road work.	\$28,419	Yes	This should be done.
RD-5	Reduce 14' two-way left turn lane to a 12' two-way turn lane.	\$69,186	No	Already included in RD-1.
RD-9	Do not realign Bethany Road.	\$183,907	Yes	This should be done.
RD-10	Delete cross hatched islands at Bethany Road and CR 8 intersection.	Design Suggestion	Yes	This should be done.
RD-11	Delete the northbound right turn lane on SR 212 at the Bethany Road intersection.	\$26,026	No	The one through lane would now become a shared through/right lane. The 2008 AADT = 13,000 vpd; 2028 AADT= 23,000 vpd.

	Description	Savings PW & LCC	Implement	Comments
ROADWAY (RD) - continued				
RD-12	Reduce the northbound left turn lane at Bethany Road.	\$45,379	Yes	This should be done.
RD-14	Steepen front slopes where possible.	\$27,500	No	This would result in the use of guardrail.
RD-15	Delete paved shoulders in areas of no new work.	\$335,321	Yes	This should be done.
RD-16	Delete the eastbound right turn lane on Bethany Road onto SR 212.	\$26,026	No	Can be constructed without additional ROW. All four quadrants will now have right turn lanes. The SR 212 AADT for 2008 = 13,000 vpd; 2028 AADT= 23,000 vpd.

A meeting was held on January 28, 2009 to discuss the above recommendations. Daniel Sanders, George Brewer, Foster Grimes with District 2 Design and Ron Wishon and Douglas Fadool with Engineering Services were in attendance.

Approved:  Date: 2/7/09
Gerald M. Ross, P. E., Chief Engineer

REW/DMF

Attachments

c: Genetha Rice-Singleton
 Daniel Sanders – District 2 Design
 Alan Smith - “ “
 Foster Grimes - “ “
 Jim Kitchings – District 2 Environmental
 James Magnus - Construction
 Rusty Merritt – District 2 Construction
 Lynn Bean - “ “
 Bryan Gibbs - “ “
 Ken Werho – Traffic Safety and Design
 Lisa Myers – Engineering Services

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA



INTERDEPARTMENT CORRESPONDENCE

DATE January 30, 2009

FROM ^{FEG} Foster Grimes, District Design Squad Leader
TO Ron Wishon, Assistant Project Review Engineer
Attn: Doug Fadool

SUBJECT STP00-0957-00(009) - Newton County
P.I. No.: 245190
Value Engineering Study: Response to Recommendations

These are the responses to the Value Engineering Alternatives recommended by the Value Engineering Team:

Response Team Observations

Plans were revised prior to the VE Study being performed based on the recently reduced posted speed of 45 MPH for this roadway. With the lower speed design the vertical and horizontal curvature of the route now meets all design criteria. The new concept consists of one 12' lane in each direction with a 14' flush median on the existing alignment. This new concept reduces right of way impacts by not displacing 3 houses and reduces the amount of new roadway construction. Many of the recommendations in this report have already been implemented.

Recommendation RD-1: Delete two way left turn; provide left turn-lanes for school and fire station.

Response: Will Implement

Initial Cost Savings: \$443,623

Recommendation RD-2: Delete two-way turn lane north of school.

Response: Do not implement

Not applicable, due to implementation of RD-1.

Recommendation RD-4: Reduce side road work.

Response: Will Implement.

The original plans show realignment from STA 18+00 to STA 29+00 (1100LF) along Butler Bridge Road and Bethany Road not the STA 140+00 to STA 163+00 as stated. The reduction in this report called for a reduction on this road to 1500LF. This office has reduced it to 1100LF. The improvements on Oak Hill Road will be reduced to STA 54+50 to STA 57+00 (250LF).

Initial Cost Savings: \$28,419

Recommendation RD-5: Reduce 14' two-way left turn lane to a 12' two-way turn lane.

Response: Do not implement

Not applicable, due to implementation of RD-1.

Recommendation RD-9: Do not realign Bethany Road

Response: Will Implement

Initial Cost Savings: \$183,907

Recommendation RD-10: Delete cross hatched islands at Bethany and CR 8 intersection.

Response: Will Implement

Initial Cost Savings: DS

Recommendation RD-11: Delete the northbound right turn lane at Bethany Road.

Response: Do not implement

The intersection will be realigned slightly to correct the intersecting angle. This realignment will require additional right of way on the southeast quadrant. Adding a right turn lane with this project while right of way cost are lower rather than in the future when right of way cost will be higher will be a wise investment for the department.

Recommendation RD-12: Reduce the northbound left turn lane at Bethany Road.

Response: Will Implement

Initial Cost Savings: \$45,379

Recommendation RD-14: Steepen front slopes where possible.

Response: Do not implement:

The Roadside Design Guide as published by the American Association of State Highway and Transportation Officials (AASHTO) calls for 24-28 ft of clear-zone on this design speed roadway. Foreslopes steeper than 1V:3H is considered a critical slope. Critical slopes are slopes in which a vehicle is likely to overturn. If a foreslope steeper than 1V:3H begins closer to the through traveled way than the suggested clear-zone distance for that specific roadway, a barrier might be warranted if the slope cannot be flattened. If we were to reduce these slopes to 1V:2H then guardrail would be required increasing project cost as well as it being a hazard. The design section will reduce the front slope width to from 16 feet to 12 feet due to the slower speed design of 45 mph, which will reduce impacts to adjacent properties.

Recommendation RD-15: Delete paved shoulders in areas of no new work.

Response: Will Implement

Initial Cost Savings: \$335,321

Recommendation RD-16: Delete the eastbound right turn lane on Bethany Road onto SR 212.

Response: Do not implement

The intersection will be realigned slightly to correct the intersecting angle. Adding a right turn lane with this project will not require any additional right of way.

If any further assistance is needed, please contact Foster C. Grimes at (478) 552-4643.

FCG

PRECONSTRUCTION STATUS REPORT FOR PI:245190-0006869

SR 212 FM S OF CR 8/BETHANY RD TO N OF CR 19/OAK HILL RD

MGMT LET DATE : Sep-11
MGMT ROW DATE : Aug-09
SCHED LET DATE : 2/23/2011
WHO LETS?: GDOT Let
LET WITH :

DOT DIST: 2
CONG. DIST: 8
BIKE: N
MEASURE: E
BRIDGE SUFF: 05
NEEDS SCORE: 05

MPO: Atlanta TMA
TIP #: NE-011
MODEL YR : 2010
TYPE WORK: Intersection Improvement
CONCEPT: TURN LANES
PROG TYPE: Reconstruction/Rehabilitation

PROJID: 245190-Newton
COUNTY: 192
LENGTH (MI): STP00-0957-00(009)
PROJ NO.: Grimes, Foster
PROJ MGR: District 2
OFFICE : No Consultant, GDOT In-House Design
CONSULTANT: GDOT
SPONSOR :
DESIGN FIRM:

PROGRAMMED FUNDS

Phase	Approved	Proposed	Cost	Fund	Status	Date Auth
PE	2000	2000	282,100.00	Q24	AUTHORIZED	3/14/2000
ROW	2009	2012	7,045,528.55	L240	PRECST	
CST	2010	2013	6,986,365.27	L240	PRECST	
STIP AMOUNTS						
Phase	Cost	Fund	STIP AMOUNTS	Phase	Cost	Fund
PE Cost Est Amt:	282,100.00	Date: 3/26/2008		PE	0.00	Q24
ROW Cost Est Amt:	5,375,000.00	Date: 6/12/2008		ROW	5,375,000.00	L240
CST Cost Est Amt:	5,474,000.00	Date: 6/12/2008		CST	5,474,000.00	L240
District Comments						
5/4/04 Sponsor-Dist T.O.; much needed proj. 8/16/07 Req submitted for waiver of Env clearance for PPR 9/27/07 CE to OEL (Major Widening Signs in Place)						
JK: Need PIOH for Appvd CE/ Will make 2009 Env						
January Mig Notes: Conc to be revd to stay on existing alignment- VE implementation last week of January						

PDD: LR: 7/11/97 ASSIGNED TO DISTRICT 2

Bridge: NO BRIDGE REQUIRED
Design: (CS) Need APD-EC-SIG
EIS: CE/NotApvd NotOnSchedRW/Updated 12-8-08/JK
LGPA: NEWTON SGN DO UTILITIES 8-2-01 RESCISSION LETTER SENT 6-3-05
Programming: #1 1-03/TEMP SR 1148; 1148TA-TG#2 6-06/#3 8-08/#4 12-08
Traffic Op: DIST 2 DO SIGN & MKG KRA 7/11/97
Utility: (JW) Need 2ND SUB PLANS PM 2/04/2009
EMG: RECSTR/REHAB (INTERSECTION IMPROVEMENT)

Prel. Parcel CT: 36 Total Parcel in ROW System:
Under Review: Options - Pending:
Released: Condemnations- Pend:

Cond. Filed:
Relocations:
Acquired:

Acquired by:
Acquisition MGR:
R/W Cert Date:

DOT

DEEDS CT: